

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/079,286	02/20/2002	Peter R. Jepson	06160-1P67	6625
157 7.	590 07/26/2006		EXAMINER	
BAYER MATERIAL SCIENCE LLC			ZHENG, LOIS L	
100 BAYER ROAD PITTSBURGH, PA 15205		•	ART UNIT	PAPER NUMBER
TITIBORGI	, 171 13203		1742	
		DATE MAILED: 07/26/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

5

	Application No.	Applicant(s)			
	10/079,286	JEPSON ET AL.			
Office Action Summary	Examiner	Art Unit			
	Lois Zheng	1742			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
1) Responsive to communication(s) filed on 06 Ju	<u>ıne 2006</u> .				
2a) ☐ This action is FINAL. 2b) ☒ This	a) This action is FINAL . 2b) ⊠ This action is non-final.				
Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.			
Disposition of Claims					
4) ☐ Claim(s) 1,3 and 5 is/are pending in the application 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1,3 and 5 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.				
Application Papers					
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) accomposed and all accomposed and are specified as a specified to the Replacement drawing sheet(s) including the correct and the specified are specified to by the Examine specified as a specified are specified	epted or b) objected to by the liderawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date S. Patent and Trademark Office					

Application/Control Number: 10/079,286

Art Unit: 1742

DETAILED ACTION

Page 2

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6 June 2006 has been entered.

Status of Claims

2. Claims 1, 3 and 5 are currently under examination.

Status of Previous Rejections

3. The Declaration under 37 CFR 1.132 filed 6 June 2006 is sufficient to overcome the rejection of claims 1, 3 and 5 based upon Michaluk et al. US 2002/0072475 A1.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Application/Control Number: 10/079,286 Page 3

Art Unit: 1742

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 7. Claims 1, 3 and 5 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alterative, under 35 U.S.C. 103(a) as obvious over Turner US 6,331,233 B1(Turner).

Turner teaches a high purity tantalum plate at least 99.95% comprising strong (111) texture with random distribution of (100) texture with mean grain size of less than about 100 microns (Table 1, processes 8-12, claims 1-2). Processes 8,9,11 and 12 as shown in Table 1 of Turner further demonstrates mean gain size of less than the claimed 40 microns. Turner further teaches that the texture of the tantalum plate is uniform throughout the thickness of the plate(abstract, col. 2 lines 34-38).

Regarding claims 1, 3 and 5, the tantalum plate as taught by Turner inherently has a thickness, a center and an edge. Since Turner teaches uniform texture through out the thickness of the tantalum plate, the examiner interprets this to mean that the

Art Unit: 1742

texture of Turner's tantalum plate is uniform in every direction from the center of the plate based on the broadest reasonable interpretation. Therefore, one of ordinary skill in the art would not have expected that the distribution of (100) and (111) crystallographic orientations in the tantalum plate of Turner would vary 30% or more across the surface of any plane or thickness of the tantalum metal plate. Furthermore, the purity and the mean grain size ranges as taught by Turner's tantalum plate either read on or overlap the claimed purity and average grain size ranges. Therefore, a prima facie case of obviousness exists. See MPEP 2144.05. The selection of claimed tantalum purity and average grain size ranges from the purity and average grain size ranges of Turner would have been obvious to one skilled in the art since Turner teach the same utilities in its disclosed purity and average grain size ranges.

Response to Argument

8. Applicant's arguments filed 6 June 2006 have been fully considered, but are most in view of the new grounds of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lois Zheng whose telephone number is (571) 272-1248. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/079,286

Art Unit: 1742

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LLZ

BEORGE WYSZÓMIERSKI PRIMARY EXAMINER GROUP (700)

Page 5